



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/918,902
Filing Date: July 31, 2001
Appellant(s): BAKER ET AL.

James A. Scheer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/15/2010 appealing from the Office action mailed 09/16/2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-4, 6-25 and 27-33 are currently pending and stands finally rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,665,395	Busey et al.	12-2003
6,771,765	Crowther	08-2004
7,092,509	Mears et al.	08-2006
6,389,132	Price	5-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 1-4, 6-25, and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busey et al. (US PAT # 6,665,395) in view of Crowther et al. (US PAT # 6,771,765) and further in view of Mears et al. (US PAT # 7,092,509).

Regarding claim 1, Busey teaches a method for distributing customer contacts to a selected one of a plurality a transaction processing entities each capable of handling a plurality of media types in a transaction processing system (this reads on distributing

Art Unit: 2614

customers' calls and questions to agents in system 10 of the call center 22, see summary of the invention, col. 4, lines 44-49, and col. 5, lines 15-25), such method comprising: determining a media type for a customer contact in the transaction processing system, the media type determined by the access channel of the customer contact (chat, e-mail, voice, ...etc in Busey); finding a transaction processing entity (agent in Busey) that is capable of handling the media type; and routing the customer contact (e.g., phone call) to a transaction processing entity (agent) that is capable of handling the media type (the claimed limitations of "determining a media type, finding a transaction processing entity that is capable of handling the media type, and routing the customer contact to a transaction processing entity that is capable of handling the media type" read all together on control 14, along with other processes and devices , which perform the function of these limitations within the call center, see col. 12, lines 26-30, col. 4, lines 65-67 and col. 8, lines 1-5. Also, for further explanations on these limitations see the summary of the invention in Busey.

Busey does not specifically teach identifying the media type as "exclusive" or "nonexclusive" and does not explicitly teach permitting no further customer **contacts** of the exclusive media type for the duration of said current customer contact when said media type is exclusive.

This claimed feature is old and notoriously well known in the art. It has been well known that, for example, if an agent in an ACD is busy with a voice/telephone call (exclusive media type), the agent would be considered busy/unavailable to handle other

Art Unit: 2614

voice/telephone calls (exclusive media type). This old feature is also taught by Crowther.

Crowther teaches in a contact call center agents are assigned priority level in each skillset so that agents can be assigned to handle customers' requests/contacts in the most effective way based on their knowledge (see col. 2, lines 48-52). Each skillset is assigned an interruptibility level which defines the importance of a skillset and whether agents assigned to a skillset may be interrupted while busy answering other calls (see col. 5, lines 10-17). The claimed "exclusive media type" reads on the highest interruptibility level (such as, voice or phone call), which cannot be interrupted (see col. 7, lines 38-46 and col. 8, lines 14-20). The claimed "non exclusive media type" reads on lower interruptibility level (such as email or fax), which can be interrupted by higher/highest interruptibility level requests such as voice call (see col. 8, lines 14-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this old and well known feature of preventing further assignment of voice calls (i.e., exclusive and high priority) to an agent who is already engaged in a voice call session, as taught by Crowther, into the Busey system in order to provide better, faster and professional services to customers. Also, this will enhance the efficiency of the call center. Thus, an existing voice call between an agent and a customer should not be "interrupted" by another voice call from another customer. The agent would give his/her full attention to the customer during the voice call.

The claimed limitation: "routing other non-exclusive customer contacts to the transaction processing entity during the current customer contact" has different interpretations. When interpreted to mean that the current customer contact is non-exclusive, then routing other non-exclusive customer contacts such as e-mail to the agent. This limitation is taught by Crowther because a non-exclusive media type contact such as e-mail may be "interrupted" by other non-exclusive media type contacts. That is, e-mails can be routed to an agent who is currently handling an e-mail. It is obvious and very logical that "non-exclusive" media type such as e-mail and fax may be routed to an agent whether the agent is handling "exclusive" type (voice call) or handling "non-exclusive" (e-mail or fax). The bottom line is: no voice calls will be routed to an agent handling voice calls which is taught by Crowther, and also well known, obvious and extremely logical.

Busey and Crowther alone or in combination do not specifically teach "establishing a table of a predetermined maximum number of customer contacts of each media type that may be simultaneously handled...etc".

However, Mears teaches in a contact center system capable of handling multiple media types of contacts simultaneously, Fig. 8 show that a table can be created for each agent reflecting agent media skill assignment (such as email, voice or web) (see Fig. 8 and corresponding text). Mears also teaches that each media type will be set a priority level (Fig. 26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of establishing table that reflect all the media types handled by a single agent simultaneously, as taught by Mears, into the combination of Busey and Crowther in order to enhance the system's efficiency by tracking each agents capability and record for each multimedia handled. Also, the claimed feature of "predetermined maximum number of customer contacts" is obvious and well known in the art. It is logical that each agent **can not** be assigned more than **one voice call**, however agent can still handle multiple chats or respond to few emails at the same time. Again, voice calls have a high priority level than chat or emails. Generally, establishing a "predetermined maximum number" of contacts is yet another well known and old telephony feature.

Claim 13 is rejected for the same reasons as discussed above with respect to claim 1. On one hand, Busey teaches determining a metric of how many customer contacts of the media type have been assigned to the transaction processing entity (this basically reads on "endpoint" (see col. 11, lines 15-67); and comparing the metric to a threshold relating to the maximum number of customer contacts of the media type that the transaction processing entity may handle (see col. 11, lines 53-67), and when the metric exceeds the threshold, preferentially routing customer contacts to another transaction processing entity (see col. 12, lines 1-6). On the other hand, Busey does not specifically teach preparing a transaction routing table of transaction processing entities

Art Unit: 2614

based on media types. However, having a routing table for each agent that contains information such as for example, the media type that he/she can best handle would have been obvious and well known in the art, since this will be considered as an agent profile that can be viewed by management in skill performance and promotions scenarios.

For claims 2-4, 6-12, 14-20, 23-25, and 27-33 the limitations are taught by Busey. The rejection in the previous office action is hereby incorporated by reference.

2. Claims 1-4, 6-25, and 27-33 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Busey et al. (US PAT # 6,665,395) in view of Crowther et al. (US PAT # 6,771,765) in view of Price (US PAT # 6,389,132) and further in view of Mears et al. (US PAT # 7,092,509).

Regarding claim 1, Busey teaches a method for distributing customer contacts to a selected one of a plurality of transaction processing entities each capable of handling a plurality of media types in a transaction processing system. See the rejection above.

Busey does not specifically teach identifying the media type as “exclusive” or “nonexclusive” and does not explicitly teach permitting no further customer **contacts** of the exclusive media type for the duration of said current customer contact. This claimed feature is old and notoriously well known in the art. It has been well known that, for

Art Unit: 2614

example, if an agent in an ACD is busy with a voice/telephone call, the agent would be considered busy/unavailable to handle other voice/telephone calls. This old feature is also taught by Crowther.

Crowther teaches in a contact call center agents are assigned priority level in each skillset so agents can be assigned to handle customers' requests/contacts in the most effective way based on their knowledge (see col. 2, lines 48-52). Each skillset is assigned an interruptibility level which defines the importance of a skillset and whether agents assigned to a skillset may be interrupted while busy answering other calls (see col. 5, lines 10-17). On one hand, the claimed "exclusive media type" reads on the highest interruptibility level (such as, voice or phone call), which cannot be interrupted (see col. 7, lines 38-46 and col. 8, lines 14-20). On the other hand, the claimed "non exclusive media type" reads on lower interruptibility level (such as email or fax), which can be interrupted by higher/highest interruptibility level requests such as voice call (see col. 8, lines 14-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of preventing further assignment of voice calls (i.e., exclusive and high priority) to an agent who is already engaged in a voice call session, as taught by Crowther, into the Busey system in order to provide better, faster and professional services to customers. Also, this will enhance the

Art Unit: 2614

efficiency of the call center. Thus, an existing voice call between an agent and a customer should not be “interrupted” by another voice call from another customer.

The claimed limitation: “routing other non-exclusive customer contacts to the transaction processing entity during the current [exclusive] customer contact” has different interpretations as discussed above. When interpreted to mean if the further customer contacts are non-exclusive, then routing other non-exclusive customer contacts that the current customer contact is exclusive (see second interpretation above).

This interpretation is not explicitly taught by Crowther or Busey. This limitation basically means an exclusive media type contact such as voice call may be “interrupted” by other non-exclusive media type contacts such as e-mails.

Price teaches multi tasking in a call center wherein a multi tasking agent who is handling a voice call session with a customer can still view or respond to an email or a text message (see col. 4, lines 25-45 and col. 7, lines 30-35).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature, if desired, of allowing an agent that is handling a voice call (exclusive) to receive and handle other tasks such as off-line messages and emails (non-exclusive), as taught by Price, into the combination of Busey and Crowther in order to improve the efficiency of the system by having a multi tasking

Art Unit: 2614

agent that is capable of providing assistance to more than one customer at the same time, if the supervisor or administrator of the ACD elects to do so. A multi tasking agent can work in partial parallel mode and use time in more efficient manner. Thus, by multitasking, the agent can reduce the overall cost to the call center (i.e., saving time and money). To multi-task (e.g., to respond to e-mails while talking on the phone) or not to multi-task (not to receive any further contacts of any type while on the phone) is a design choice to be made by the supervisor. The decision to elect one or the other does not rise to the level of patentability and does not require ingenuity.

Busey, Crowther and Price alone or in combination do not specifically teach "establishing a table of a predetermined maximum number of customer contacts of each media type that may be simultaneously handled...etc".

However, Mears teaches in a contact center system capable of handling multiple media types of contacts simultaneously, Fig. 8 show that a table can be created for each agent reflecting agent media skill assignment (such as email, voice or web) (see Fig. 8 and corresponding text).Mears also teaches that each media type will be set a priory level (Fig. 26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of establishing table that reflect all the media types handled by a single agent simultaneously, as taught by Mears, into

Art Unit: 2614

the combination of Busey, Crowther and Price in order to enhance the system's efficiency by tracking each agent's capability and record for each multimedia handled. Also, the claimed feature of "predetermined maximum number of customer contacts" is obvious and well known in the art. It is logical that each agent **can not** be assigned more than **one voice call**, however agent can still handle multiple chats or respond to few emails at the same time. Again, voice calls have a high priority level than chat or emails.

Claim 13 is rejected for the same reasons as discussed above with respect to claim 1. On one hand, Busey teaches determining a metric of how many customer contacts of the media type have been assigned to the transaction processing entity (this basically reads on "endpoint" (see col. 11, lines 15-67); and comparing the metric to a threshold relating to the maximum number of customer contacts of the media type that the transaction processing entity may handle (see col. 11, lines 53-67), and when the metric exceeds the threshold, preferentially routing customer contacts to another transaction processing entity (see col. 12, lines 1-6). On the other hand, Busey does not specifically teach preparing a transaction routing table of transaction processing entities based on media types. However, having a routing table for each agent that contains information such as for example, the media type that he/she can best handle would have been obvious and well known in the art, since this will be considered as an agent profile that can be viewed by management in skill performance and promotions scenarios.

Claims 21-22 are rejected for the same reasons as discussed above with respect to claim 1. Also, for claims 22-23 limitations, Busey teaches searching a transaction processing entity that is not handling an exclusive media type (this may read on availability of agent, see col. 8, lines 6-9 and/or the priority of task the agent is handling at the current time, see col. 3, lines 55-60); determining a metric of how many customer contacts of the media type have been assigned to the transaction processing entity (basically reads on “endpoint”, see col. 11, lines 15-67); and comparing the metric to a threshold relating to the maximum number of customer contacts of the media type that the transaction processing entity may handle (see col. 11, lines 53-67), and when the metric exceeds the threshold, preferentially routing customer contacts to another transaction processing entity (see col. 12, lines 1-6).

For claims 2-4, 6-12, 14-20, 23-25, and 27-33 the limitations are taught by Busey. The rejection in the previous office action is hereby incorporated by reference.

(10) Response to Argument

Appellant argues (Brief, Pages 10-12) that neither Busey nor Crowther teach or suggest contact distribution which prevents further assignment of an exclusive type to a processing entity when an exclusive type has already been assigned while still assigning non-exclusive types to that processing entity when said media type is exclusive. The Examiner respectfully disagrees with Appellant. The above basically

Art Unit: 2614

means that when an agent is busy with a telephone call, no other telephone call will be routed to the agent but e-mail and fax may be routed to the agent. This is old, well known, extremely logical and taught by the prior art as discussed in the art rejection above.

First, as explained in the above rejection, Busey does not specifically teach identifying the media type as “exclusive” or “nonexclusive” and does not explicitly teach permitting no further customer **contacts** of the exclusive media type for the duration of said current customer contact when said media type is exclusive.

However, this feature is well known in the art. Since for example, if an agent in an ACD is busy with a voice/telephone call, the agent would be considered busy/unavailable to handle other voice/telephone calls. In addition, to support Examiner’s position, the Examiner submitted Crowther which teaches in a contact call center agents are assigned priority level in each skillset so that agents can be assigned to handle customers’ requests/contacts in the most effective way based on their knowledge (see col. 2, lines 48-52). Each skillset is assigned an interruptibility level which defines the importance of a skillset and whether agents assigned to a skillset may be interrupted while busy answering other calls (see col. 5, lines 10-17). The claimed “exclusive media type” reads on the highest interruptibility level (such as, voice or phone call), which cannot be interrupted (see col. 7, lines 38-46 and col. 8, lines 14-20). The claimed “non exclusive media type” reads on lower interruptibility level (such as email or fax), which can be interrupted by higher/highest interruptibility level requests such as voice call (see col. 8, lines 14-20). Thus, the combination of Busey and Crowther will

Art Unit: 2614

result in fast and efficient customer service which allows an agent within call center to serve one voice call only (note that voice call is exclusive and higher priority). Thus, an existing voice call between an agent and a customer should not be “interrupted” by another voice call from another customer. The agent would give his/her “full attention” to the customer during the voice call. Also, the claimed “routing other non-exclusive customer contacts to the transaction processing entity during the current customer contact” has different interpretations as discussed above. When interpreted to mean that the current customer contact is non-exclusive, then routing other non-exclusive customer contacts(see first interpretation above), then this limitation is taught by Crowther because a non-exclusive media type contact such as e-mail may be “interrupted” by other non-exclusive media type contacts. That is, e-mails can be routed to an agent who is currently handing an e-mail.

Second, the Examiner provided a second and a separate rejection which explains that the claimed limitation of: “routing other non-exclusive customer contacts to the transaction processing entity during the current [exclusive] customer contact” has different interpretations as discussed above. When interpreted to mean if the further customer contacts are non-exclusive, then routing other non-exclusive customer contacts that the current customer contact is exclusive (see second interpretation above). This interpretation is not explicitly taught by Crowther or Busey. This limitation basically means an exclusive media type contact such as voice call may be “interrupted” by other non-exclusive media type contacts such as e-mails. Therefore, the Examiner introduced Price which teaches multi tasking in a call center wherein a multi tasking

Art Unit: 2614

agent who is handling a voice call session with a customer can still view or respond to an email or a text message (see col. 4, lines 25-45 and col. 7, lines 30-35). Thus, applying the teachings of Price (if desired) into the combination of Busey and Crowther will result to allow an agent who is handling a voice call (exclusive) to receive and handle other tasks such as off-line messages and emails (non-exclusive). This also will improve the efficiency of the system by having a multi tasking agent that is capable of providing assistance to more than one customer at the same time, if the supervisor or administrator of the ACD elects to do so.

Thus, an agent who is assigned a voice call (i.e., exclusive and high priority) cannot be assigned or interrupted with another voice call (i.e., exclusive and high priority). However, this agent can be assigned and interrupted with off-line messages and emails (i.e., non-exclusive and lower priority) since this will not affect agent performance of handling the voice call (i.e., exclusive and high priority) but it will increase agent productivity.

Appellant argues (Brief, Page 12) that “The passage of Price at col. 4, lines 25-45 merely describes establishing a connection and then, after satisfying the customer, the session is disconnected. This describes a single customer contact with an agent, there in no multitasking”. The Examiner submitted Price to exclusively teach the use of “multi-tasking, web-based call center”, the Examiner cited in the above rejection two passages (col. 4, lines 25-45 and col. 7, lines 30-35). In col. 7, lines 30-35 Price states that agent 30 can multitask across multi media conversation types, for example, agent 30 can simultaneously handle a live voice conversation, a live text conversation and an

Art Unit: 2614

off-line email task. As it is known the definition of "simultaneously" means at the same time, this means that agent 30 is handling two different multimedia tasks at the same time and this is what is considered a multitasking. Also, it must be noted that simply "routing" an e-mail to the agent, as recited in the claims, does not necessarily mean that the agent must "handle" the e-mail immediately while he/she is talking on the phone. Non-real time contacts such as fax or e-mail may be "routed" to a busy agent without necessarily immediately "interrupting", for example, an existing phone call.

Appellant argues (Brief, Page 12) "However, there is no description in either of the claimed feature of routing a current contact to a processing entity (e.g., agent) and permitting no further exclusive contacts by the agent during the contact when the current contact is exclusive while continuing to route other non-exclusive contacts to the agent during the exclusive current contact". It is noted that Appellant is arguing each reference individually and not considering the 35 USC § 103 (a) rejection as a whole.

Appellant argues (Brief, Page 13) that "The Final Office Action asserts that agent skills are not distinguishable from media type because agent skills are basically tied to the media type". Appellant adds that "This is clearly a characteristic assigned to the agent while media type is a characteristic of the media channel". Appellant concludes that "Thus, interruptibility level assigned to agent skillsets taught by Crowther is entirely different from the claimed media type". The Examiner would like to clarify that even though the skills is a characteristic assigned to the agent while media type is a characteristic of the media channel, the Examiner strongly believe that the skillsets of an agent is associated with the media type in this scenario because determining the

Art Unit: 2614

skills of a particular agent will help to determine what type of media type that this agent is capable of doing, such as voice calls, emails, text or chat.

Appellant also adds (Brief, Page 13) "As a consequence, Crowther concerns matching agent skills to requirements of calls while the invention concerns the opposite, matching media type (i.e., channel attributes) to agents. The Examiner believes that matching agent skills to media types or matching the media types to agent skills are substantially the same and both lead to the same end result. Whether to identify the media type first and then match the agent skillset who is capable of serving this media type or identifying the agent skillset first and then assigning the appropriate media type to that particular agent.

Appellant argues (Brief, Page 13) "Since interrupt levels in Crowther are assigned to skillsets, they do not teach or suggest the exclusive or non-exclusive media types of the claims, and there is no teaching to support applying the Crowther interrupt to the media types of the claims". Again, it is noted that Appellant is arguing each reference individually and not considering the 35 USC § 103 (a) rejection as a whole.

Appellant argues (Brief, Page 14) that "The Final Office Action also asserts that the difference between media type and agents skills is irrelevant because the claims don't recite 'skills'". First, it is not clear which part of the Final Office Action the Office asserts that "the difference between media type and agents skills is irrelevant". Second, Appellant is reminded that Crowther introduced to teach the use of "exclusive" and "non-exclusive" media type. The description of agent skillsets is part of the teachings

Art Unit: 2614

within the Crowther reference to explain how the priority level and interruptibility of each media type such as, voice, email and the like are tied to the agent skills.

Appellant also adds (Brief, Pages 14-15) that “The Final Office Action asserts that the exclusive media type is same as the highest interruptibility level, and the non-exclusive media type is the same as the lowest interruptibility level. However, this is not accurate. The media type concerns characteristics of the media channel, and is not an agent or agent skillset interruptibility level”. The Examiner respectfully submits that the media types (such as voice, e-mail or chat) are related to the agent skillsets and the interruptibility level. Once the media type is identified, the agent with the best or matching skillsets will be assigned to serve this media type (such as, accepting voice calls, or answering emails). Off course, the voice calls are exclusive media types which have higher/highest priority level than non-exclusive media types (fax, e-mails...etc) which have a lower interruptibility level. An exclusive media type with a higher priority level (such as voice calls) cannot be interrupted by another exclusive media type with a higher priority level (such as voice calls). However, exclusive media type with a higher priority level (such as voice calls) can be interrupted by a non-exclusive media type of a lower priority level (such as email or chat), since this can be considered a multitasking that can be performed based on the need and desire.

Appellant argues (Brief, Page 15) that “Busey is not concerned with the number of contacts of each media type assigned to an processing entity but merely the total number of contacts assignable without consideration of media type”. The Examiner respectfully disagrees with Appellants argument, since Busey realizes the importance of

Art Unit: 2614

allowing a single agent to handle more than one media type (i.e., endpoint). Busey states that "The ability to allocate multiple endpoints to a single agent helps maximize agent effectiveness" (see col. 11, lines 15-22).

Appellant argues (Brief, Page 16) that "Transaction routing tables are recited in independent claim 13 and 21 from which dependent claims 14-20 depend. Such 'transaction routing tables of transaction processing entities based on media type' recited in claims 13 and 21 are not disclosed by Busey, Crowther, Price, or Mears. Nor do Busey, Crowther, Price, Or Mears suggest such tables of a predetermined maximum number of customer contacts of each media type that may be simultaneously handled and including current assignments". Appellant also adds "The Final Office Action concedes that Busey and Crowther do not teach this feature but assert that Mears does so in Fig.8. However, Fig. 8 of Mears is a window which permits an administrator to add media types to an agent profile". The Examiner respectfully disagrees with Applicant's argument for the following reasons: first, Fig. 8 cited by the Examiner is not just a window. However it is actually a table that reflects all media types for an agent. This table also allows adding more media types or removing some media types. The fact of tracking how many media types are in there or within the table is believed to be obvious since the table simply can reflect a number of how many e-mail, voice or fax an agent has. Again this limitation is considered obvious within the teachings of Mears and does not rise the invention to the level of patentability.

Art Unit: 2614

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Rasha S AL-Aubaidi/
Primary Examiner, Art Unit 2614

/Ahmad F Matar/
Supervisory Patent Examiner, Art Unit 2614

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614